

**WHAT IS CLAIMED IS:**

1. An apparatus for inputting Korean vowels, the apparatus comprising:

a gesture database that stores codes of a first set of Korean vowels, wherein the codes of the first set of the Korean vowels correspond to gestures input by a user on a touch screen; and

a gesture confirmation unit that searches the gesture database, and then selects and outputs a corresponding code of a Korean vowel of the first set of Korean vowels based on a gesture input by the user on the touch screen.

2. The apparatus of claim 1, further comprising:

a touched area confirmation unit that checks whether an area touched by the user is a vowel area or not, based on touched area signals representing the area touched by the user on the touch screen, and if the area touched by the user is the vowel area, outputs the touched area signals to the gesture confirmation unit,

wherein the gesture confirmation unit checks whether the touched area signals correspond to the gesture or not, and if the touched area signals correspond to the gesture, searches the gesture database, and then selects and outputs the corresponding code of the Korean vowel of the first set of Korean vowels corresponding to the gesture.

3. The apparatus of claim 1, wherein the gesture confirmation unit determines the touched area signals as corresponding to the gesture if the touched area signals are generated for a stroking action in a vowel area displayed on the touch screen.

4. The apparatus of claim 3, wherein the vowel area comprises a downward left-hand stroke area representing a downward left-hand stroke at a center of the vowel area, a first horizontal stroke area and a second horizontal stroke area representing a horizontal stroke respectively disposed above and below the downward left-hand stroke area, and a first vertical stroke area and a second vertical stroke area representing a vertical stroke respectively at a left side and a right side of the downward left-hand stroke area.

5. The apparatus of claim 4, wherein the gesture confirmation unit determines the gesture input by the user according to kinds of plural areas in the vowel area stroked by the stroking action, searches the gesture database, and then, selects the code of the Korean vowel of the first set corresponding to the gesture.

6. The apparatus of claim 5, wherein the gesture confirmation unit determines the gesture input by the user to correspond to the Korean vowel of the first set of Korean vowels based on rules, wherein the Korean vowel is: a vowel “ㅓ” when the gesture represents a line drawn from the first vertical

stroke area to the downward left-handed stroke area; a vowel “ㅓ” when the gesture represents a line drawn from the downward left-handed stroke area to the second vertical stroke area; a vowel “ㅗ” when the gesture represents a line drawn from the downward left-handed stroke area to the second horizontal stroke area; or a vowel “ㅜ” when the gesture represents a line drawn from the first horizontal area to the downward left-handed stroke area.

7. The apparatus of claim 5, wherein the gesture confirmation unit determines the gesture input by the user to correspond to the Korean vowel of the first set of Korean vowels based on rules, wherein the Korean vowel is: a vowel “ㅓ” when the gesture represents a line drawn from the first vertical stroke area through the downward left-handed stroke area to the second vertical stroke area; and a vowel “ㅗ” when the gesture represents a line drawn from the first horizontal stroke area to the second vertical stroke area or a line drawn from the second horizontal stroke area to the second vertical stroke area.

8. The apparatus of claim 6, further comprising:  
a preceding vowel storage unit that stores a preceding code corresponding to a Korean vowel previously input by the user; and  
a preceding vowel processor that generates double vowel code based

on the code of the Korean vowel of the first set or on a code of a Korean vowel of a second set, input from the gesture confirmation unit and the preceding codes that are stored in the preceding vowel storage unit.

9. A method of inputting Korean vowels, the method comprising:

- (a) receiving a gesture input by a user on a touch screen;
- (b) determining a Korean vowel of a first set of Korean vowels corresponding to the gesture; and
- (c) outputting the Korean vowel.

10. The method of claim 9, wherein step (a) further comprises:

- (a1) deciding whether an area touched by the user on the touch screen, in a touching action, is a vowel area or not; and
- (a2) checking whether the touching action of the user on the touch screen is the gesture or not, if the area touched by the user is the vowel area.

11. The method of claim 10, wherein step (a2) determines the touching action to be the gesture if the touching action is a stroking action in the vowel area displayed on the touch screen.

12. The method of claim 11, wherein the vowel area includes a

downward left-hand stroke area representing a downward left-hand stroke at a center of the vowel area, a first horizontal stroke area and a second horizontal stroke area representing a horizontal stroke respectively above and below the downward left-hand stroke area, and a first vertical stroke area and a second vertical stroke area representing a vertical stroke respectively at a left side and a right side of the downward left-hand stroke area.

13. The method of claim 12, wherein step (b) determines the gesture input by the user according to kinds of plural areas in the vowel area stroked by the stroking action.

14. The method of claim 13, wherein step (b) determines the gesture input by the user to correspond to the Korean vowel of the first set of Korean vowels based on rules, wherein the Korean vowel is: a vowel “ㅏ” when the gesture represents a line drawn from the first vertical stroke area to the downward left-hand stroke area; a vowel “ㅑ” when the gesture represents a line drawn from the downward left-hand stroke area to the second vertical stroke area; a vowel “ㅓ” when the gesture represents a line drawn from the downward left-hand stroke area to the second horizontal stroke area; or a vowel “ㅕ” when the gesture represents the first horizontal area to the downward left-hand stroke area.

· · · · ·  
· · · · ·

15. The method of claim 13, wherein step (b) determines the gesture input by the user to correspond to the Korean vowel of the first set of Korean vowels based on rules, wherein the Korean vowel is: a vowel “ㅏ” when the gesture represents a line drawn from the first vertical stroke area through the downward left-hand stroke area to the second vertical stroke area; a vowel “ㅓ” when the gesture represents a line drawn from the first horizontal stroke area to the second vertical stroke area or a line drawn from the second horizontal stroke area to the second vertical stroke.

16. The method of claim 14, further comprising: (d) generating double vowels based on the code of the Korean vowel of the first set of Korean vowels determined at step (c) or a code of a Korean vowel of a second set and a preceding vowel code that was previously stored.

17. A computer readable medium having embodied thereon a computer program for a method of inputting Korean language characters, the method comprising: (a) receiving a gesture input by a user on a touch screen; (b) determining a Korean vowel corresponding to the gesture; and (c) outputting the Korean vowel.

18. An apparatus for inputting Korean vowels, comprising:

- a Korean language character input unit, which comprises a plurality of keys for inputting Korean vowels, wherein the plurality of keys comprises:
  - a downward left-hand stroke key, which represents a downward left-hand stroke of Korean vowels;
  - a first horizontal stroke key, which is located above the downward left-hand stroke key and represents a horizontal stroke of Korean vowels;
  - a second horizontal stroke key, which is located below the downward left-hand stroke key and represents the horizontal stroke of Korean vowels;
  - a first vertical stroke key, which is located leftward of the downward left-hand stroke key and represents a vertical stroke of Korean vowels; and
  - a second vertical stroke key, which is located rightward of the downward left-hand stroke key and represents the vertical stroke of Korean vowels.

19. The apparatus of claim 18 further comprising a vowel combination unit, which outputs a Korean vowel “ㅏ” when a user sequentially hits the first vertical stroke key and the downward left-hand stroke key, a Korean vowel “ㅑ” when the user sequentially hits the downward left-hand stroke key and the second vertical stroke key, a Korean vowel “ㅓ” when the user sequentially hits the downward left-hand stroke key and the second horizontal stroke key, and a Korean vowel “ㅕ” when the user

sequentially hits the first horizontal stroke key and the downward left-hand stroke key.

20. The apparatus of claim 18, wherein the Korean language character input unit is a hardware keyboard.

21. The apparatus of claim 18, wherein the Korean language character input unit is a touch screen, and the plurality of keys for inputting Korean vowels are displayed on the touch screen .

22. The apparatus of claim 8, wherein the Korean vowel of the second set of Korean vowels corresponds to a click in the vowel area.

23. The method of claim 16, wherein the Korean vowel of the second set of Korean vowels corresponds to a click in the vowel area.